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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,020

04/07/2006

Pierre Barberis

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7053

23280 7590 04/12/2010
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EXAMINER

ZHU, WEIPING

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

04/12/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,020	Applicant(s) BARBERIS ET AL.	
	Examiner WEIPING ZHU	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8,9,11,15,16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8,9,11,15,16 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 8, 9, 11, 15, 16 and 18 are currently under examination, wherein claims 8 and 15 have been amended in applicant's amendment filed on January 11, 2010.

Status of Previous Rejections

2. The previous rejections of claims 8, 9, 11, 15, 16 and 18 under 35 U.S.C. 103(a) as stated in the Office action dated October 9, 2009 are maintained as follows:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8, 9, 11, 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as unpatentable over Diz et al. (US 6,544,361 B1) as stated in the Office action dated October 9, 2009.

With respect to the amended features of changing "comprising" to "consisting of" in the instant process claims 8 and 15, Diz et al. ('361 B1) discloses a process for producing a flat product made of a zirconium alloy having Kearns factors of between 0.09 and 0.68 (col. 5, lines 6-9) comprising the steps as claimed in the instant claims 8 and 15 (col. 3, line 5 to col. 5, line 35) as stated in the Office action dated October 9, 2009. Diz et al. ('361 B1) does not disclose that additional and/or different steps are

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required. Therefore, the process disclosed by Diz et al. ('361 B1) still meet the claimed limitation of "consisting of".

Response to Arguments

4. The applicant's arguments filed on January 11, 2010 have been fully considered but they are not persuasive.

First, the applicant argues that Diz et al. ('361 B1) fails to teach the limitation of the claimed final hot rolling temperature and there is no motivation to modify the teachings of Diz et al. ('361 B1). In response, the examiner notes that as stated in the Office action dated October 9, 2009, the final hot rolling temperature is a result-effective variable, because it would directly affect the final microstructure and size of the blank of Diz et al. ('361 B1) prepared for the following process steps as disclosed by Diz et al. ('361 B1) (col. 1, lines 6-67). The final microstructure would obviously affect the Kearns factors. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the final hot rolling temperature of Diz et al. ('361 B1) in order to achieve the desired microstructures and sizes as required. See MPEP 2144.05 II. To achieve the desired microstructures and sizes including the desired Kearns factors are proper motivations.

Second, the applicant argues that the process of Diz et al. ('361 B1) cannot inherently lead to the claimed Kearns Factor FT. In response, see examiner's response to applicant's first argument above. The claimed and Diz et al. ('361 B1)'s flat zirconium alloy products are identical or substantially identical in composition and are produced by identical or substantially identical processes. Therefore a prima facie case of

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obviousness exists. The same Kearns Factor FT as claimed in instant claims 8 and 15 would be expected (not inherently) in the flat zirconium alloy product of Diz et al. ('361 B1). See MPEP 2112.01 [R-3] I. Furthermore, it is noted that the final hot rolling temperature of 770-790 °C as disclosed by Diz et al. ('361 B1) appears to be overlapping the final hot-rolling temperature of $\alpha + \beta$ to β transition temperature ± 130 °C as claimed in the instant claims 11 and 18 and the final hot rolling temperature of higher than 810-Nb% °C as disclosed in the instant specification (page 6). The trial 9 in the instant specification has a Kearns Factor FT of 0.375 (Table 2) and a final hot rolling temperature of 780 °C (Table 1). The Kearns Factor FT of 0.23 as disclosed by Diz et al. ('361 B1) (col. 5, lines 6-11) was obtained from the 0.425 mm thick sheet having by weight 1.01-1.03% of Nb (col. 3, lines 10-15) and a final hot-rolling temperature of 770-790 °C (col. 3, lines 49-51). Diz et al. ('361 B1) does not disclose the Kearns Factor FT of a sheet having by weight 1.3% of Nb and a final hot-rolling temperature of 790 °C.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Roy King/
Supervisory Patent Examiner, Art
Unit 1793

WZ

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